DOCUMENT RESUME

ED 064 320 TM 001 485

AUTHOR	Cunningham, Jo Lynn; Boger, Robert P.
TITLE	Development of an Observational Procedure for Assessment of Parent-Child Interaction.
INSTITUTION	Michigan State Univ., East Lansing. Inst. for Family and Child Research.
SPONS AGENCY	Office of Economic Opportunity, Washington, D.C.
PUB DATE	Apr 72
NOTE	34p.; Paper presented at the annual meetings of the National Council on Measurement in Education and the American Educational Research Association (Chicago, Illinois, April 1972)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Behavior Rating Scales; *Interaction Process Analysis; Measurement Techniques; *Observation; *Parent Child Relationship; Preschool Children; *Rating Scales; Task Performance
IDENTIFIERS	*Parent Child Interaction Rating Procedure; PCIRP

ABSTRACT

The feasibility of using an observational rating schedule to elicit information about parent-child interaction was studied. The Parent-Child Interaction Rating Procedure (P-CIRP), focusing specifically on parent-child interaction with a structured teaching task, was developed for this purpose. The interaction setting is teaching the child simple two-dimensional sorting tasks. Three tasks were used: a toy sort, an eight-block sort, and a nine-block sort. Each task involves a three-part session: the examiner explains the task to the parent; the examiner leaves the room and the parent teaches the child the task; and the examiner returns to test the child's task performance with the parent present, but not intervening, so that the behavior of both the parent and child can be rated. All three parts of each session are videotaped. The P-Cirp, developed for assessment of the videotaped interaction, is composed of three parts--a general information section, a rating form section for the parent-child teaching period and the session, and a rating form section for the parent-child-examiner testing period. Information recorded for each section is described. Rating procedures and usability are discussed and illustrated. Preliminary analyses of data obtained from about 100 preschool children (1-1/2 to 5 years old) and their parents over a 3-year period indicate that the P-CIRP is equally appropriate for the diverse groups with which it has been used and that it does provide a sensitive measure of parent-child interaction. Appendixes present the Parent-Child Interaction Rating Procedure Code Definitions, and Rating Forms. (DB)

ED 064320

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

DEVELOPMENT OF AN OBSERVATIONAL PROCEDURE FOR ASSESSMENT OF PARENT-CHILD INTERACTION

Jo Lynn Cunningham
and
Robert P. Boger

Institute for Family and Child Study
Michigan State University
East Lansing, Michigan 48823

TM 001 485

Presented at the annual meetings of the National Council on Measurement in Education and the American Educational Research Association, Chicago, Illinois, April, 1972.

This research was supported by Office of Economic Opportunity Grant No. CG 9931 (1969-72).

INTRODUCTION

Information about parent-child interaction has several important implications for educators. Since parents are a child's first and most important teachers, knowledge of the ongoing educational process which they direct is helpful in planning the more formal educational programs of the school. Assessment of parent-child interaction can be helpful as a diagnostic tool in planning individualized instruction with the children and/or parents. Examination of the reciprocal influences between parent and child provides valuable clues to understanding teaching-learning and the development of behavior patterns. Finally, as programs are developed which involve parents as active members of the educational team, information about the parents' communication patterns and teaching styles can provide a valuable base for utilizing their potential contributions.

The need for developing objective, reliable, and valid measures of parent-child interaction became evident in the search for measures to be used in a study of differential socialization patterns of preschool children which is currently being conducted at the Michigan State University Institute for Family and Child Study. Consideration of the criteria of special importance for such instrumentation suggested the potential usefulness of a systematic observational rating procedure.

The unique demands of studying young children have traditionally suggested the use of direct observation. Lytton (1971) has summarized the history and development of objective observation studies from their beginning in the thirties. At that time, observations were typically of children's behavior in isolation; only after World War II did there appear systematic observations of parent-child relationships. Most studies, however, have employed either parental reports or summary observations of molar variables, both of which present obvious

problems of objectivity, reliability, and validity.

Wright (1960), a pioneer in observational child study, has suggested that observational methods are ultimately the simplest way of studying child behavior. Two primary methodological advantages of observation are that neither planned arrangements nor appreciable time stands between the observer and his target phenomena.

A distinct disadvantage of many methodological procedures, however, including most observational methods, is their limitation to either quantitative or qualitative measures. Ideally, both should be included, with the additional requirement that the context of the indicated quantitative measures be retained for purposes of analysis.

A critical concern for developmental studies and therefore of particular importance for early childhood measures is comparability over extended periods of time. This need is best satisfied by procedures which are systematic and which impose both structure and objectivity on the observer, thus guaranteeing maximum comparability whether one or several observers are used during the course of a study.

Finally, a system should readily lend itself to quantitative analysis without losing its qualitative dimensions, particularly those relating to sequences of events and context of activities. At the same time, the multidimensionality which is a desirable aspect of complex behavioral observations should not stand in the way of straightforward analysis of any given dimension.

Since an observational rating schedule would appear to fulfill these various criteria, the feasibility of using such a procedure was investigated. The Parent-Child Interaction Rating Procedure (P-CIRP), focusing specifically on parent-child interaction with a structured teaching task, was developed for this purpose.

INSTRUMENT DESCRIPTION

Task Procedures

In order to obtain as natural a sample of dyadic interaction as possible in a standardized setting, an unstructured task-oriented situation was selected. Criteria for the task included suitability for preschool children from diverse subcultural groups as well as a task level simple enough to be easily understood by the parents yet complex enough to present a challenging situation.

The interaction setting is teaching the child simple two-dimensional sorting tasks. Two such tasks have been used with mothers, a toy sort and an eight-block sort, both adapted from the Hess-Shipman procedures (Hess, et al., 1968). A third task, a nine-block sort, was developed for use with the fathers, since each child is paired individually with each of his parents (Cunningham and Boger, 1969).

Each task involves a three-part session. First, the examiner explains the task to the parent (with the child absent from the room), using a procedure specifically designed not to provide a teaching model. During the second part of the session, the examiner leaves the room and the parent teaches the child the designated task. Finally, the examiner returns to test the child's task performance. The parent, though instructed not to intervene during this time, remains physically present so the behavior of both the parent and the child can be rated. All three parts of each session are videotaped to enable detailed analysis of the complex phenomena of interest.

Observational Rating

The Parent-Child Interaction Rating Procedure (P-CIRP) was developed for assessment of the videotaped interaction. This instrument is composed of three

parts--a general information section, a rating form section for the parent-child teaching period of the session, and a rating form section for the parent-child-examiner testing period. No observational rating is done of the portion of the session during which the examiner instructs the parent in the task procedures.

Information recorded for each section is described below. Descriptions of the various variable categories are given in Appendix 1.

General Information Section

General information is recorded by the observer for the total session. Information included in this section is the following: length of demonstration period, length of teaching period, length of testing period, length of orientation, use of orienting statement, decision-maker for termination, and reason for termination.

Rating Form--Section 1

Section 1 is used for rating the parent and the child during the time that the parent teaches the child the designated task. Variables rated in this section are as follows:

(1) Verbal communication--Verbalization, Verbal Fantasy, Voice Tone, Verbal Specificity, Time Orientation, Task Orientation, and Nature of Interference;

(2) Interaction process--Feedback, Reward, Response, Initiation, Response Object, and Reinforcement;

(3) Nonverbal communication--Affective Tone, Anxiety, Level of Involvement, Physical Behavior, Dependency (child only), and Inferred Motivation (child only);

(4) Parental teaching (parent only)--Concept and Teaching Method.

Rating Form--Section 2

Section 2 is used for rating the parent and the child during the time that the examiner tests the child on the task following the parent-child teaching session. The following variables are included in this section:

(1) Verbal communication--Verbalization, Verbal Fantasy, Voice Tone, Task Orientation, and Verbal Receiver;

(2) Nonverbal communication--Anxiety, Physical Behavior, Level of Involvement, Dependency (child only), and Inferred Motivation (child only);

(3) Intervention (parent only)--Cue, Cue Directiveness, Cue Type, Defensiveness, Defensiveness Target, and Defensiveness Object.

RATING PROCEDURES

General Procedures and Format

The P-CIRP (Sections 1 and 2) uses a combination time- and event-sampling procedure, an approach which has several methodological advantages. The observed events are natural situations and thus possess an inherent validity not ordinarily gained in pure time sampling. Important behavioral events are captured although they may occur at very infrequent intervals, while the systematic sample of behavior recorded can be reasonably assumed to be representative. Finally, a continuity of behavior is obtained by this procedure which is important to the particular variables under consideration (Kerlinger, 1964).

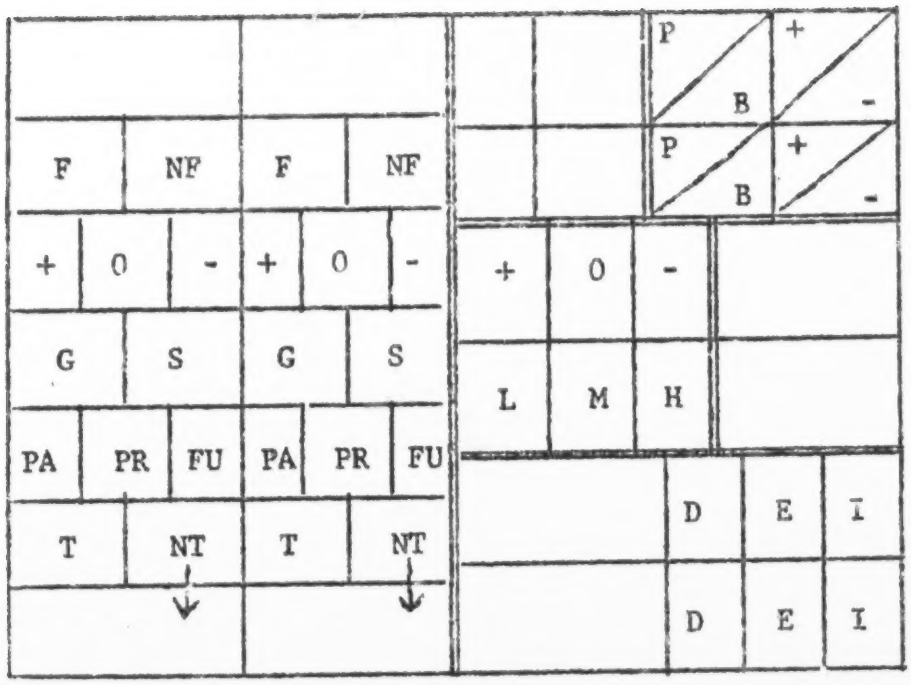
An observation interval of twenty seconds was selected for the P-CIRP. This interval was chosen because it is short enough to include a reasonable recordable unit of behavior, yet long enough to observe and record a meaningful unit. Delineation of intervals for videotape rating is faciltated by attaching an automatic signal tone to the videotape unit for recording purposes.

During each twenty-second interval, the occurrence of a particular behavior is recorded. Allowance is made for recording up to two behaviors for several sets of scales--verbal communication (Verbalization, Verbal Fantasy, Voice Tone, Verbal Specificity, Time Orientation, Task Orientation, Nature of Interference, and Verbal Receiver), interaction (Feedback, Reward, Response, Initiation, Response Object, and Reinforcement), parental teaching(Concept, Teaching Method, Cue, Cue Directiveness, Cue Type, Defensiveness, Defensiveness Target, and Defensiveness Object), and Inferred Motivation. On all others, the single category best characterizing that point in time is noted.

The formats for the frames (representing single intervals) for the parent and the child on each section are shown in Figures 1 through 4. In addition, sample rating sheets for all three sections of the P-CIRP are attached in Appendix 2.

Both sections must contain a code for each interval in each code position. If no specific code is applicable, an "X" is coded in that position. This use of a specific designation rather than leaving spaces blank if no specific code is applicable is important as a means of obtaining the most complete and reliable data possible. Thus, it is not possible for an observer to overlook a behavior which should be recorded because of misinterpretation of a space in which no code appears.

Each interval is rated as an individual unit. Therefore, impressions of an individual's behavior at a previous time do not influence the ratings made for any subsequent interval except insofar as the context of a preceding interval must be considered for adequate interpretation of a unit of behavior. The observer's frame of reference is described as external to the process. That is, each event is viewed in terms of its theoretical properties from the "generalized other" perspective defined by Bales (1951). The time reference, of course, is

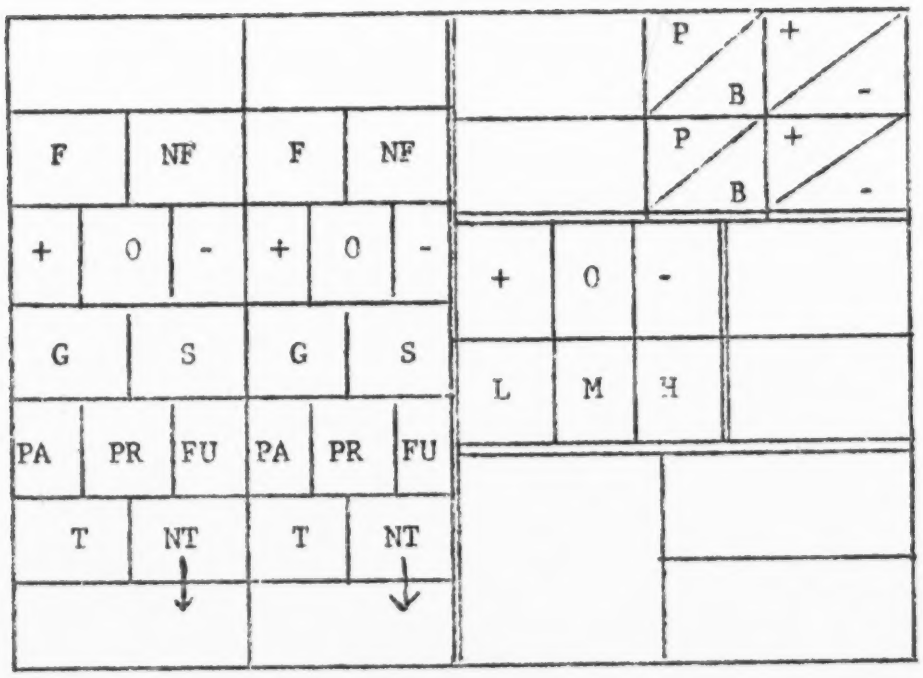


Rating Frame

Verbal Code #1	Verbal Code #2	Feedback Code #1 Reward Code #1	Response Code #1 Initiation Code #1	Response Object Code #1	Reinforcement Code #1
Fantasy Code #1	Fantasy Code #2	Feedback Code #2/ Reward Code #2	Response Code #2/ Initiation Code #2	Response Object Code #2	Reinforcement Code #2
Voice Tone Code #1	Voice Tone Code #2	Affective Tone Code		Level of Involvement Code	
Specificity Code #1	Specificity Code #2	Anxiety Code		Physical Behavior Code	
Time Orientation Code #1	Time Orientation Code #2	Concept Code #1		Teaching Method Code #1	
Task Orientation Code #1	Task Orientation Code #2	Concept Code #2		Teaching Method Code #2	
Nature of Interference Code #1	Nature of Interference Code #2				

Format

Fig. 1. Section 1--Parent Observation: Parent-Child Interaction Rating Procedur

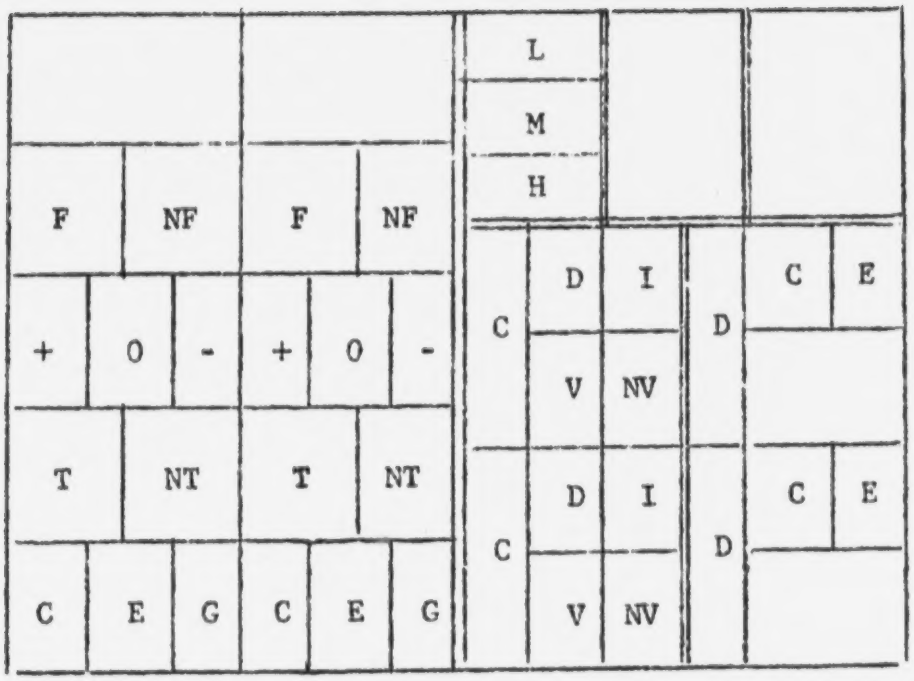


Rating Frame

Verbal Code #1	Verbal Code #2	Feedback Code #1/ Reward Code #1	Response Code #1/ Initiation Code #1	Response Object Code #1	Reinforce-ment Code #1
Fantasy Code #1	Fantasy Code #2	Feedback Code #2/ Reward Code #2	Response Code #2/ Initiation Code #2	Response Object Code #2	Reinforce-ment Code #2
Voice one Code #1	Voice one Code #2	Affective Tone Code		Level of Involvement Code	
Specificity Code #1	Specificity Code #2	Anxiety Code		Physical Behavior Code	
Time Orientation Code #1	Time Orientation Code #2	Dependency Code		Inferred Motivation Code #1	
Task Orientation Code #1	Task Orientation Code #2			Inferred Motivation Code #2	
Nature of Interference Code #1	Nature of Interference Code #2				

Format

Fig. 2. Section 1--Child Observation: Parent-Child Interaction Rating Procedure

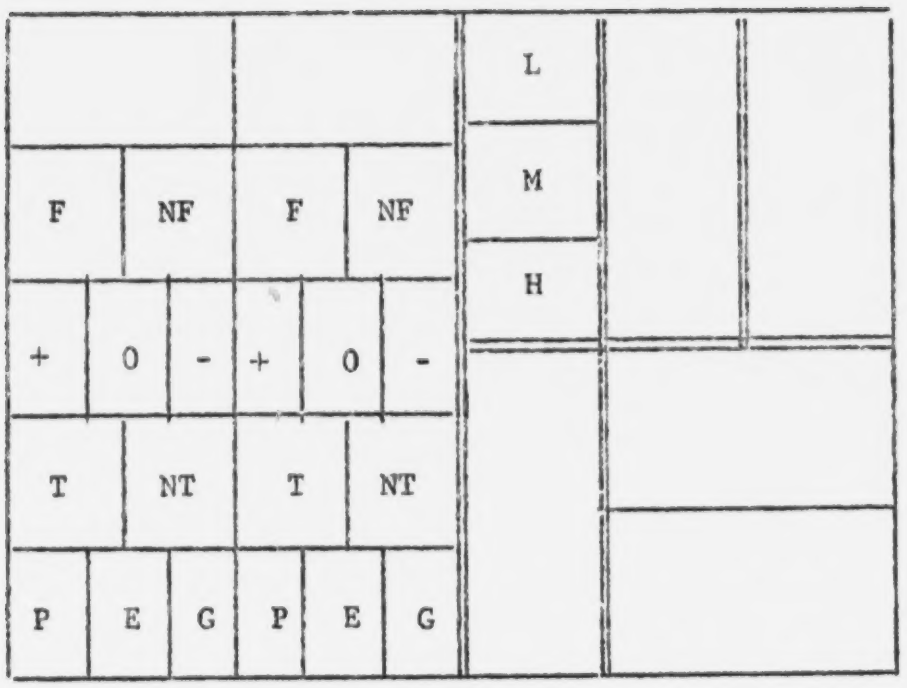


Rating Frame

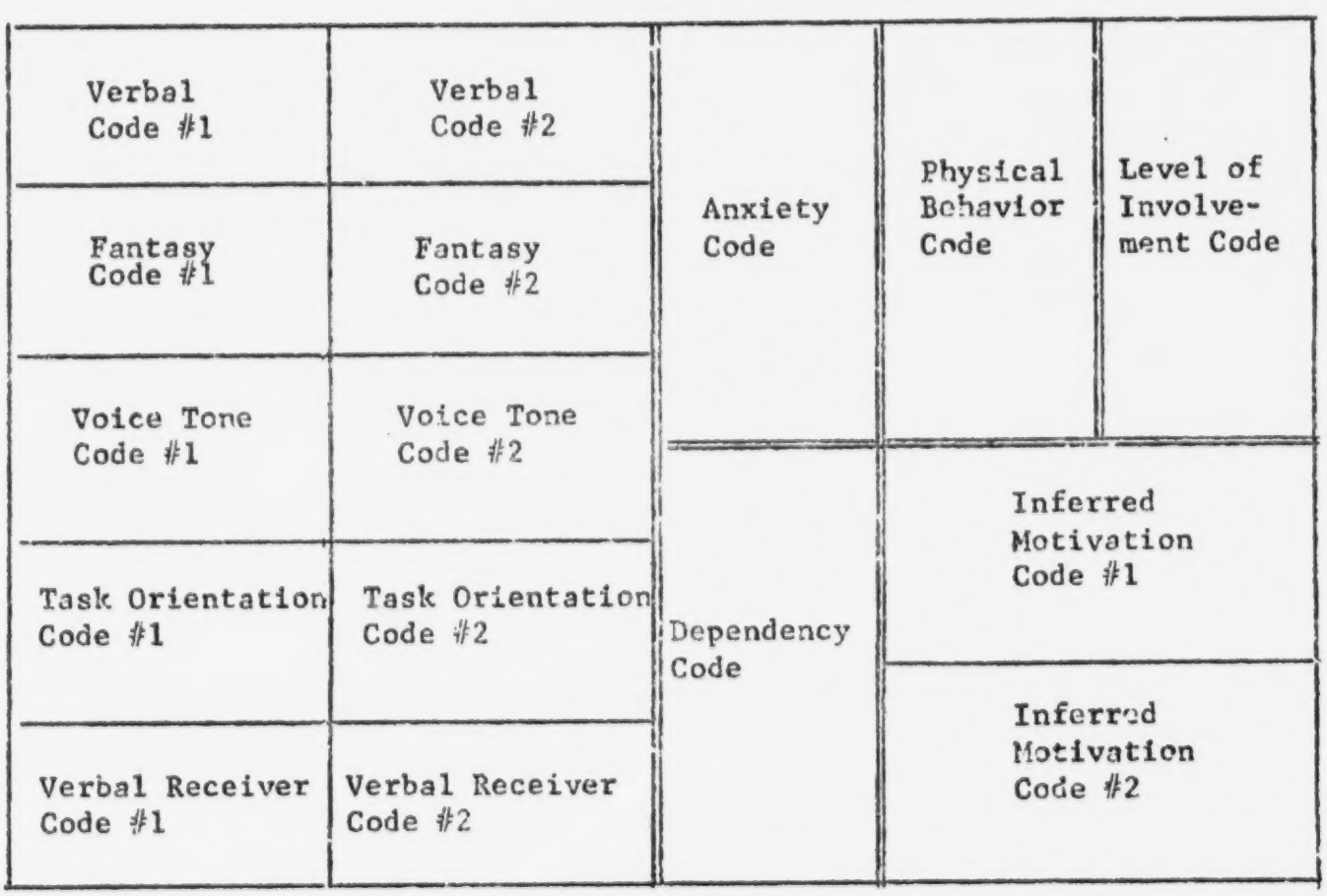
Verbal Code #1	Verbal Code #2	Anxiety Code	Physical Behavior Code	Level of Involvement Code
Fantasy Code #1	Fantasy Code #2			
Voice Tone Code #1	Voice Tone Code #2	Cue Code #1	Cue Directiveness Code #1	Defensiveness Code #1	Defensiveness Target Code #1
			Cue Type Code #1		Defensiveness Object Code #1
Task Orientation Code #1	Task Orientation Code #2	Cue Code #2	Cue Directiveness Code #2	Defensiveness Code #2	Defensiveness Target Code #2
			Cue Type Code #2		Defensiveness Object Code #2
Verbal Receiver Code #1	Verbal Receiver Code #2				

Format

Fig. 3. Section 2--Parent Observation: Parent-Child Interaction Rating Procedur



Rating Frame



Format

Fig. 4. Section 2--Child Observation: Parent-Child Interaction Rating Procedur

limited to the immediate context.

Several viewings of each tape are necessary for completing the ratings. It is suggested that one rater be used to rate an entire tape. This is important for gaining the most accurate and complete information with maximum efficiency in the complex situation presented.

Rater Training Procedures

Initial training of observers in the use of the P-CIRP is accomplished with the aid of videotaped interaction segments. The training program includes extensive practice in using the rating schedule, clarification of variable categories and rating procedures through group discussion, and resolution of discrepancies among observers.

Following a minimum of one week's practice with the P-CIRP, observer reliability is determined with the use of videotapes not previously viewed by that observer. When possible, reliability is established concurrently with more than one observer. This guards against the possibility of gradual shifts in interpretation over time, an event which would tend to increase discrepancies in the long run even though amount of disagreement at any given time would be within the limits of tolerated error. After reliability is established, each observer devotes several days to additional practice with the P-CIRP before actual collection of data is attempted.

Continued quality control of ratining is maintained by two procedures. Regular group discussion sessions are held with all raters working together in order to clarify unusual situations or new questions which may have been encountered. In addition, periodic checks are made of intra- and interobserver reliability. Occasional written quizzes are also given to raters.

USABILITY

Reliability

Interobserver reliability is established by two independent observers simultaneously recording the behaviors of the same person in the same intervals on their respective recording forms. Intraobserver reliability is established by a single observer rerating a previously observed tape.

Two methods of computing reliability are used, one based on total blanks and the other based on total recorded positions. Each type of reliability is computed for both parent and child observations for each section of the instrument and also for each separate scale. Minimum suggested reliability indices are given in Table 1. These minimum reliability rates must be attained conjointly for each observer on an observation of at least ten consecutive minutes. Reliability must be established separately for each section.

For each method, points for determining total-instrument reliability are assigned to each variable category position as shown in Figure 5. Total points obtained are computed for each complete observation. An index of percentage reliability is derived by dividing agreements (number of points) in each case by the total possible points for that method.

Computation of observer reliability by the first procedure (total blanks) credits the observers with agreements for those instances on which they agree that no recordable behavior occurred (i.e., both recorded an "X" for that category of that interval). Formulas used for figuring total-instrument reliability by this method are as follows:

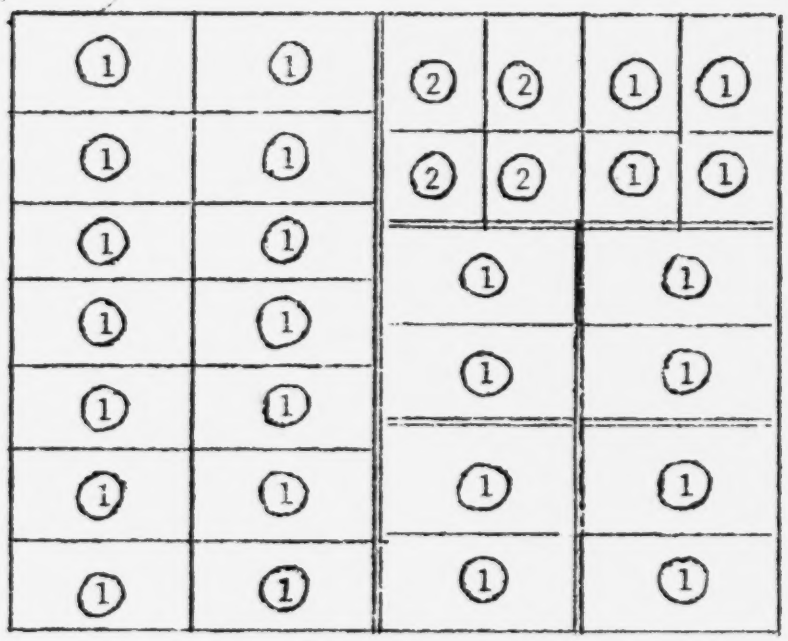
Section 1--Parent Observation:

$$\% \text{ reliability} = \frac{\text{Agreements (Number of points)}}{\text{Number of frames x 34}}$$

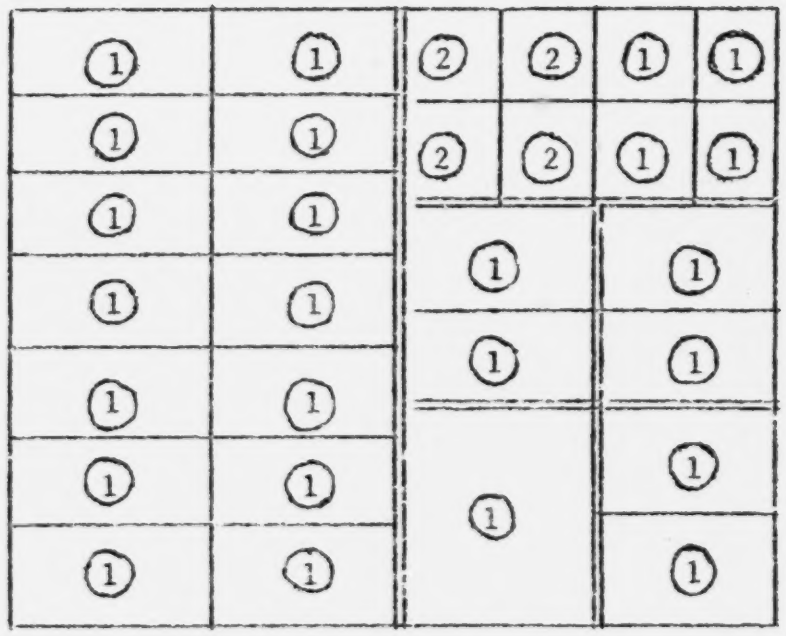
TABLE 1

Minimum Suggested Rater Reliability Indices
for Parent-Child Interaction Rating Procedure

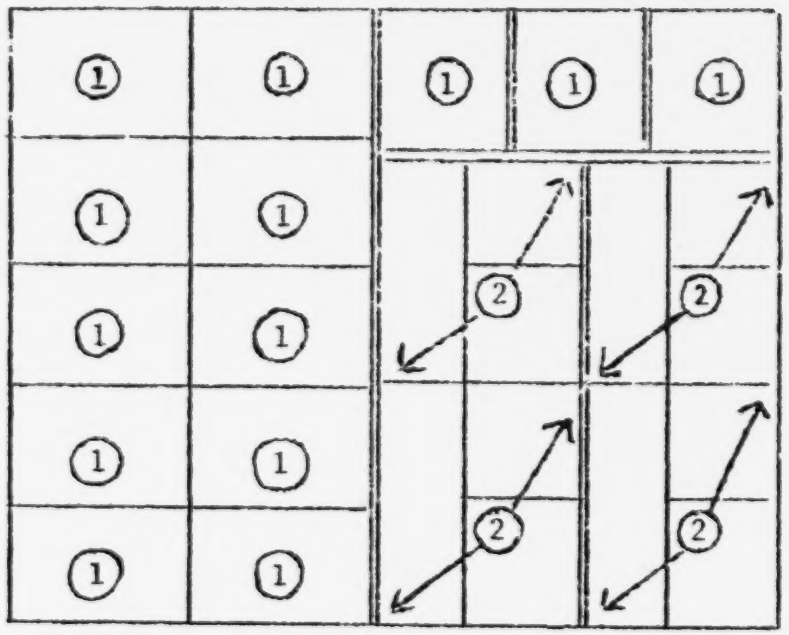
Method	Type of Reliability	
	Interobserver	Intraobserver
	Entire Section	
Total Blanks	.85	.90
Total Recorded Positions	.65	.75
	Individual Scales	
Total Blanks	.80	.85
Total Recorded Positions	.60	.70



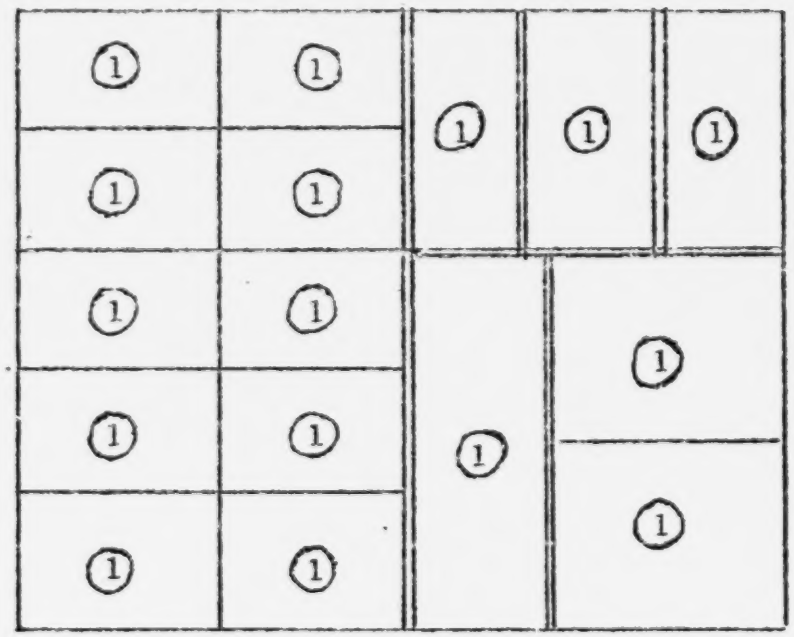
Section 1--Parent



Section 1--Child



Section 2--Parent



Section 2--Child

Fig. 5. Assignment of Points for P-CIRP Rater Reliability.

Section 1--Child Observation:

$$\% \text{ reliability} = \frac{\text{Agreements (Number of points)}}{\text{Number of frames} \times 33}$$

Section 2--Parent Observation:

$$\% \text{ reliability} = \frac{\text{Agreements (Number of points)}}{\text{Number of frames} \times 21}$$

Section 2--Child Observation:

$$\% \text{ reliability} = \frac{\text{Agreements (Number of points)}}{\text{Number of frames} \times 16}$$

Individual scale reliability is figured as follows:

Sections 1 and 2--Parent and Child Observations:

$$\% \text{ reliability} = \frac{\text{Agreements (Number of frames)}}{\text{Number of intervals in total observation}}$$

Computation of observer reliability by the second method (total recorded positions) considers only those positions in which one or both observers record something other than "X." The formula for figuring total-instrument reliability by this method is as follows:

Sections 1 and 2--Parent and Child Observations:

$$\% \text{ reliability} = \frac{\text{Agreements (Number of points)}}{\text{Agreements plus disagreements (Number of points possible for positions in which either observer recorded any code)}}$$

Individual scale reliability is figured as follows:

Sections 1 and 2--Parent and Child Observations:

$$\% \text{ reliability} = \frac{\text{Agreements (Number of frames)}}{\text{Agreements plus disagreements (Number of frames in which either observer recorded any code)}}$$

Validity

No validity indices for the P-CIRP are available at this time. However, several approaches to the assessment of this psychometric consideration have been used to provide support for a satisfactory indication of instrument validity.

First, a measure of content validity was achieved. Construction of the P-CIRP was based on theoretical contributions of social, developmental, and educational psychology. Preliminary testing of the procedure was conducted in field settings throughout the early stages of its development.

Another factor by which the validity of the P-CIRP may be indicated is the use of scales from previously validated instruments. The Verbalization scale is based on Bales' (1951) Interaction Process Analysis, which has been widely used over a period of years. The Initiation scale is adapted from a procedure developed by Moustakas, Sigel, and Schalock (1956); the Time Orientation scale is based on the work of Kluckhohn (1961); Verbal Fantasy draws from a measure developed by Banta (1970); and Verbal Specificity is based on the work of Hess, Shipman, et al. (1968). Several P-CIRP scales (Affective Tone, Level of Involvement, Physical Behavior, and Inferred Motivation) are also based on scales from the Observation of Socialization Behavior (Boger and Cunningham, 1969), a structured observational rating procedure using a format very similar to the P-CIRP.

Additional instrument evaluation procedures, including factor analysis and measures of concurrent validity, are also planned. The investigations performed thus far, however, provide favorable indications of the validity of the P-CIRP for the assessment of parent-child interaction in a task-oriented dyadic setting.

Analysis

Since the P-CIRP covers a relatively wide range of behaviors, several different approaches to analysis are possible. Both individual and dyad scores can be

obtained on either an absolute or a ratio scale. Either individual variable scores or indices derived from combinations of variables can be used for quantitative and qualitative analysis of the interaction. A repeated measures organization can also be used in determining variable scores to investigate the process as well as the content of interaction.

Both general and specific kinds of information may be determined with the P-CIRP. Some examples of specific types of questions are:

Type	Example
(1) Proportion of time for general behavior	(1) What proportion of the time does the parent engage in verbalization?
(2) Proportion of time for dimension of behavior	(2) What proportion of the time does the parent engage in asking questions?
(3) Proportion of general behavior for dimension of behavior	(3) What proportion of the parent's verbalization is the asking of questions?
(4) Proportion of time for specific behavior	(4) What proportion of the time does the parent ask information-seeking questions?
(5) Relative proportion of time for specific behavior	(5) What proportion of the parent's verbalization is for questions which are information-seeking?
(6) Relative proportion of dimension of behavior for specific behavior	(6) Of all questions asked by the parent, what proportion are information-seeking?
(7) Proportion of time for general behavior in specific context	(7) What proportion of the time that the parent is highly anxious does he engage in verbalization?
(8) Proportion of time for dimension of behavior in specific context	(8) What proportion of the time that the parent is highly anxious does he ask questions?
(9) Proportion of time for specific behavior in specific context	(9) What proportion of the time that the parent is highly anxious does he ask information-seeking questions?
(10) Relative proportion of dimension of behavior for specific behavior in specific context	(10) What proportion of the questions asked by the parent while he is highly anxious are information-seeking?

Each of these questions may be asked in relation to either the parent or the child or for one in relation to the other. Examples of the latter are:

Type	Example
(1) Proportion of time for one person's general behavior in relation to other person's behavior	(1) What proportion of time that the child is engaged in verbalization is the parent highly anxious?
(2) Proportion of time for dimension of one person's behavior in relation to other person's behavior	(2) What proportion of time that the child is asking questions is the parent highly anxious?
(3) Proportion of time for specific behavior in relation to other person's behavior	(3) What proportion of time that the child is asking information-seeking questions is the parent highly anxious?
(4) Description of one person's behavior in relation to general behavior of other person	(4) What is the parent's average level of anxiety during the time the child is engaged in verbalization?
(5) Description of one person's behavior in relation to dimension of other person's behavior	(5) What is the parent's average level of anxiety during the time the child is asking questions?
(6) Description of one person's behavior in relation to specific behavior of other person	(6) What is the parent's average level of anxiety during the time the child is asking information-seeking questions?

Process-oriented questions may also be asked with P-CIRP data. Some specific examples are:

Type	Example
(1) Process for dimension of behavior	(1) What kind of verbalization by the parent most typically follows his asking a question?
(2) Process for specific behavior	(2) What kind of verbalization by the parent most typically follows his asking an information-seeking question?
(3) Process for dimension of one person's behavior in relation to other person's behavior	(3) What kind of verbalization by the child most typically follows a question by the parent?

Type	Example
(4) Process for one person's specific behavior in relation to other person's behavior	(4) What kind of verbalization by the child most typically follows an information-seeking question by the parent?

General behavioral profiles may also be identified, either for specific variables (e.g., verbalization) or for combinations of variables (e.g., general styles of interaction). Any one of the questions might, of course, be asked in terms of a specified group rather than an individual subject. The particular set of scores to be used in any case is determined by the objectives or hypotheses of that study.

Applicability

The P-CIRP has been used with nearly one hundred preschool children and their parents over a three-year period. The children have ranged in age from 2 1/2 to 5 years and have represented a range of socioeconomic and ethnic groups. In addition to descriptions of parent-child interaction variables, comparisons have been made between these variables and other dimensions of the children's behavior (e.g., peer-group interaction, individual predispositions to behavior).

Preliminary analyses of the data obtained thus far with the P-CIRP indicate that it is equally appropriate for the diverse groups with which it has been used and that it does in fact provide a sensitive measure of parent-child interaction. The potential flexibility of its use suggests an even broader application than has currently been attempted.

A manual for the P-CIRP is presently being prepared in accordance with the APA-AERA-NCME Standards for Educational and Psychological Tests and Manuals. Copies of the preliminary manual are currently available from the authors.

REFERENCES

American Psychological Association. Standards for educational and psychological tests and manuals. Washington, D.C.: American Psychological Association, 1966.

Bales, R. F. Interaction process analysis. Cambridge: Addison-Wesley, 1951.

Banta, T. J. Tests for the evaluation of early childhood education: The Cincinnati Autonomy Test Battery (CATB). In J. Helmuth (Ed.), Cognitive studies, Vol. I. New York: Brunner/Mazel, 1970, 424-490.

Boger, R. P., and Cunningham, J. L. Differential socialization patterns of preschool children. Interim report #2, Early Childhood Research Center, Michigan State University, 1970.

Boger, R. P., and Cunningham, J. L. Observation of Socialization Behavior. Unpublished instrument description, Head Start Research Center, Michigan State University, 1969.

Cunningham, J. L., and Boger, R. P. Father-Child Interaction: Nine Block Sorting Task. Unpublished instrument description, Head Start Research Center, Michigan State University, 1969.

Cunningham, J. L., and Boger, R. P. Parent-Child Interaction Rating Procedure. Unpublished instrument description, Early Childhood Research Center, Michigan State University, 1970.

Hess, R. D., Shipman, V. C., Brophy, J. E., and Bear, R. M. The cognitive environments of urban preschool children. Final report on Research Grant #R34, The University of Chicago Graduate School of Education, 1968.

Kerlinger, F. N. Foundations of behavioral research. New York: Holt, 1964.

Kluckhohn, F. Variations in value orientations. Evanston, Ill.: Row, Peterson and Co., 1961.

Lytton, H. Observation studies of parent-child interaction: A methodological review. Child Development, 1971, 42, 651-684.

Moustakas, C. E., Sigel, I. E., and Schalock, M. D. An objective method for the measurement and analysis of child-adult interaction. Child Development, 1956, 27, 109-134.

Wright, H. F. Observational child study. In P. H. Mussen (Ed.), Handbook of research methods in child development. New York: Wiley, 1960, 71-139.

APPENDIX 1

Parent-Child Interaction Rating Procedure

Code Definitions

PARENT-CHILD INTERACTION RATING PROCEDURE

Code Definitions

Description of information included in the general information section is as follows:

Length of Demonstration Section = Number of minutes in first section of session, during which the examiner teaches the task to the parent

Length of Teaching Section = Number of minutes in second section of session, during which the parent teaches the task to the child

Length of Testing Section = Number of minutes in third section of session, during which the examiner tests the child on the task in the presence of the parent

Length of Orientation = Number of minutes in the teaching section (beginning at the time the child enters the room and rating of Section II begins) until the parent calls for the first object placement by the child

Use of Orienting Statement = Whether or not the parent gives a statement to the child explaining the general nature of the situation and the task to be learned

Decision for Termination = Who makes the decision to terminate the teaching section of the session (parent, child, or examiner)

Reason for Termination = Reason given for ending the teaching section of the session (e.g., time limit, child learns task, etc.)

The categories for each code used in Sections I and II of the rating procedure and descriptions of them are as follows:

Verbalization

SL = Shows solidarity; raises other's status; gives help or reward

TR = Tension release; jokes; laughs; shows satisfaction

AG = Agrees; shows passive acceptance; understands; concurs; complies

SU = Gives suggestions or direction, implying autonomy for others

OP = Gives opinion, evaluation or analysis; expresses feeling or wish

OR = Gives orientation or information; repeats; clarifies; confirms

AR = Asks for orientation, information, repetition, confirmation

AP = Asks for opinion, evaluation, analysis, expression of feelings

AS = Asks for suggestion, direction, possible ways of action

DS = Disagrees; shows passive rejection or formality; withholds help

ST = Shows tension; asks for help; withdraws "out of field"

AN = Shows antagonism; deflates other's status; defends or asserts self

MM = Mumbling

X = No verbalization

Fantasy

F = Fantasy verbalization

NF = Nonfantasy verbalization

Voice Tone

+ = Positive affect conveyed by voice tone

0 = Neutral voice tone; no affect conveyed

- = Negative affect conveyed by voice tone

Specificity

G = Global verbalization; no specific labels

S = Specific verbalization; includes labels and/or explicit directions

Time Orientation

PA = Past reference; refers to anything which occurred in the past (even in present situation)

PR = Present reference; reference to immediate situation or task

FU = Future reference; refers to anything to occur in the future (even in present situation)

Task Orientation

T = Task-oriented verbalization; refers to performance of task presented in situation

NT = Non-task-oriented verbalization; refers to situation or experience other than the task presented or to specific avoidance of that task

Nature of Interference

O = Outside interference; not initiated by either parent or child

Pm = Parent-initiated diversion involving non-task use of materials

Pe = Parent-initiated diversion which focuses on immediate environment

Pn = Parent-initiated diversion which focuses on nonsituational factors

Cm = Child-initiated diversion which involves non-task use of materials

Ce = Child-initiated diversion which focuses on immediate environment

Cn = Child-initiated diversion which focuses on nonsituational factors

X = No interference; task-related verbalization

Verbal Receiver

C = Child as intended receiver of verbalization

P = Parent as intended receiver of verbalization

E = Examiner as intended receiver of verbalization

G = Group-directed verbalization (undifferentiated receiver)

Feedback

O = Overt acceptance or rejection of immediately preceding communication of other person

C = Covert acceptance or rejection of immediately preceding communication of other person

X = No immediately preceding communication by other person or no response to such a communication (used with Response codes D, I, N, and O)

Reward

p = Praise (used only with Feedback codes O and C)

c = Criticism (used only with Feedback codes O and C)

x = No praise or criticism given (implied with Feedback code X)

Response

D = Failure to respond because the other did not allow it

I = Ignoral; failure to respond to communication by other person, even though there is opportunity to do so

N = No feedback given because there is no immediately preceding communication by the other person

A = Acceptance of communication of other person

R = Rejection of communication of other person

O = Ongoing interaction which is continued from previous interval

Initiation

u = Unqualified power assertion; attempt to make use of jurisdiction by physical punishment, isolation, insistence upon a specified behavior, etc.

q = Qualified power assertion; attempt to make use of jurisdiction by punishment, isolation, direction, or insistence, but with the addition of a reason or a cushion or both to this exertion of authority

r = Bargain, appeal, or suggestion for behavior with offer of a reward (which may be tangible or intangible) for compliance; bribe

c = Suggestion of action in which the other person is given a choice of compliance

n = Simple command or request for response which does not assert power or offer a choice or reward for compliance; neutral initiation (used with 0 if continuation of communication from previous interval)

f = Failure to continue interaction by initiation of new idea or direction (implied with Response codes D and with 0 if ongoing to next interval; cannot be used with Response code N)

Response Object

P = Acceptance or rejection of the person as an individual

B = Acceptance or rejection of the behavior or performance of the other person

X = No response given (used with Response codes D, I, N, and 0)

Reinforcement

+ = Correct or appropriate response to behavior

- = Incorrect or inappropriate response to behavior

X = No response given (used with Response codes D, I, N, and 0)

Affective Tone

+ = Positive social-emotional tone; conveys affection for other person

0 = Neutral; no indicated affect

- = Negative social-emotional tone; conveys lack of affection or annoyance with other person

Level of Involvement

1 = Extremely involved in situation or task

2 = Moderate or average level of involvement with situation or task

3 = Passively involved with situation or task; "serving time" in the situation

Anxiety

L = Low anxiety level; no apparent anxiety shown

M = Moderate anxiety level; some indication of anxiety expressed

H = High anxiety level; obvious tension or discomfort in situation

Physical Behavior

NP = Negative physical behavior; behavior which is not socially acceptable and which involves physical contact between the subject and some other person or object (e.g. hitting, pushing)

SP = Social physical behavior; behavior which is socially acceptable and/or conveys affection and which involves physical contact between the subject and some other person; intentional physical contact conveying affection for an object (e.g. patting, holding hands)

AP = Approach gesture; behavior which is socially acceptable or positive in connotation and which does not involve actual physical contact between the subject and another person or object (e.g. beckoning)

DF = Defensive posture; behavior which is not socially acceptable or is negative in connotation and which does not involve actual physical contact between the subject and another person or object (e.g. shaking fist)

NM = Neutral motion; physical behavior which does not convey either positive or negative connotation but which is intentional communicative act (e.g. head nod)

X = No nonverbal (physical) behavior

Concept

NC = Introduction of new concept in teaching (task-oriented) behavior; may be verbal and/or nonverbal

AP = Introduction of a new approach to teaching the same concept; may be verbal and/or nonverbal but must apply to teaching (task-oriented) behavior

AS = Focus on a different aspect of the same concept; may be verbal and/or nonverbal but must apply to teaching (task-oriented) behavior

ON = Ongoing method for teaching the same concept; no change in focus

GO = General orientation to learning task or concept(s) to be presented

GS = General summary of learning task or concept(s) to be presented

X = No task-oriented (teaching) behavior present (used only with Task Orientation code NT)

Teaching Method

D = Demonstration only; nonverbal approach used

E = Explanation only; approach used is verbal only

I = Illustration of concept; both verbal and nonverbal teaching methods used

X = No task-oriented (teaching) behavior OR Task-oriented (teaching) behavior with ON by parent because child is doing task and parent does nothing during interval

Dependency

1 = High level of psychological dependency shown

2 = Some psychological dependency shown

3 = No psychological dependency shown

Inferred Motivation

NO = Innovativeness

ND = Independence

AG = Aggression

IM = Imitation

AT = Attention-seeking

BO = Boasting

FE = Fear

X = No apparent inferred motivation

Cue

C = Cuing occurs by parent to child concerning performance of task

X = No cuing by parent to child concerning performance of task

Cue Directiveness

D = Direct cuing to child by parent

I = Indirect cuing to child by parent

X = No cuing occurs (covered by Cue code X)

Cue Type

V = Verbal cue given (may be used alone or in combination with NV)

NV = Nonverbal cue given (may be used alone or in combination with V)

X = No cuing occurs (covered by Cue code X)

Defensiveness

D = Defensive statement made by parent concerning situation

X = No defensive behavior by parent

Defensiveness Target

C = Child is target of parent's defensive statement

E = Examiner is target of parent's defensive statement

X = No defensive statement given (covered by Defensiveness code X)

Defensiveness Object

Ca = Child designated as being at fault, with blame directed to his abilities

Co = Child designated as being at fault, with blame directed to reasons other than his abilities

Pa = Parent designated as being at fault, with blame directed to his abilities (e.g. teaching effectiveness)

Po = Parent designated as being at fault, with blame directed to reasons other than his abilities

Se = Situation designated as being at fault, with emphasis on environment or immediate circumstances

St = Situation designated as being at fault, with emphasis on the task per se

X = No defensive statement given (covered by Defensiveness code X)

APPENDIX 2

Parent-Child Interaction Rating Procedure

Rating Forms

PARENT-CHILD INTERACTION RATING PROCEDURE

Child _____ Task _____

Child ID _____ Date _____

Child Peer Code _____

Race _____ Examiner _____

Sex _____

SES _____ Observer _____

Child's Age _____ _____ _____
Years Months Days

Child's Previous Preschool Experience _____
Months

Adult _____

Relation to Child _____

General Information

Length of demonstration section _____

Length of teaching section _____

Length of testing section _____

Length of orientation _____

Use of orienting statement

☐ Yes ☐ No

Decision for termination

☐ Parent ☐ Child ☐ Examiner

Reason for termination _____

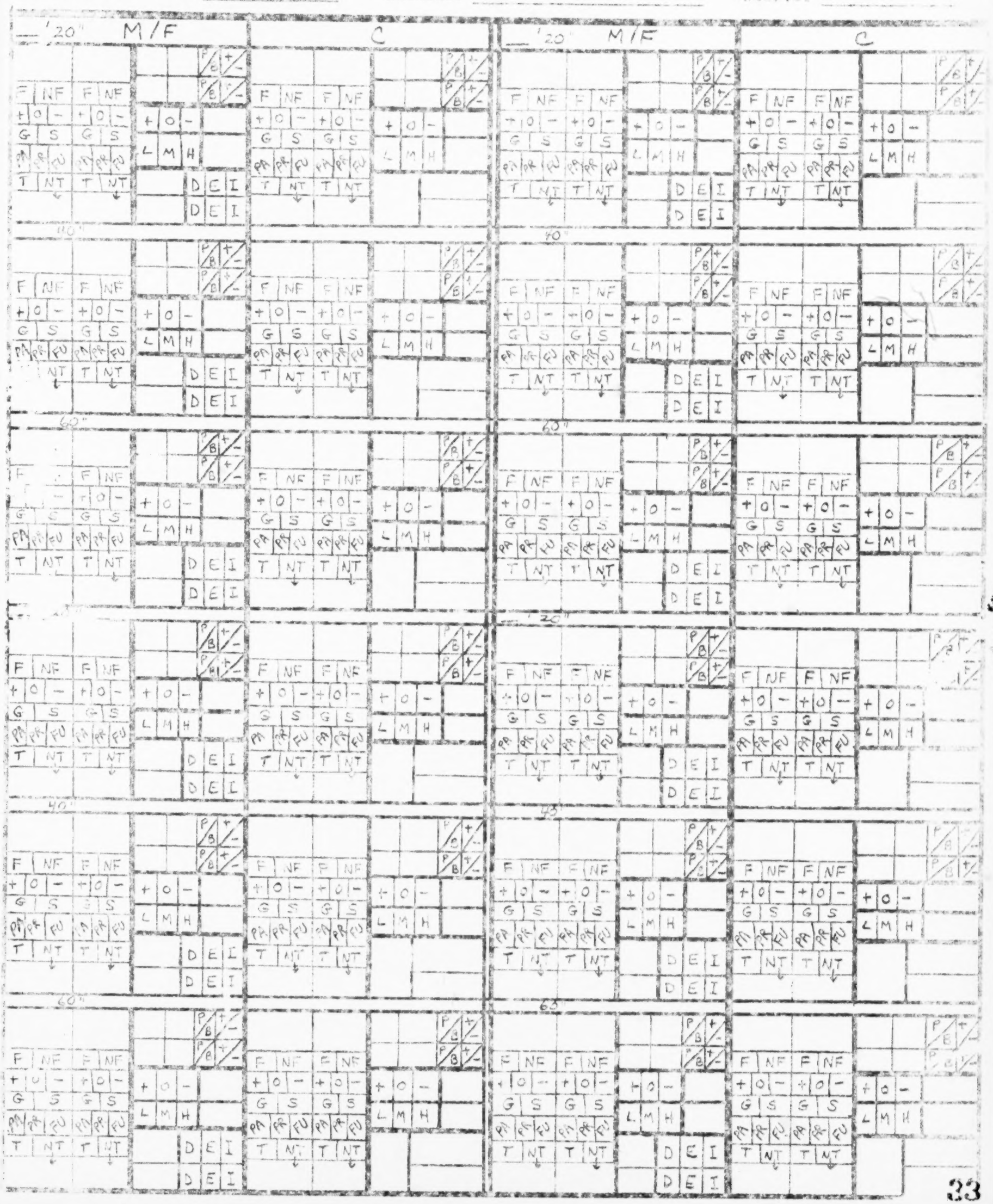
Notes

PARENT-CHILD INTERACTION RATING PROCEDURE--Section 1

Child _____ Test _____

Child "ID" _____ Relation to Child _____ Date _____

Child Peer Code _____ Examiner _____ Observer _____



Child _____ Adult _____ Task _____

Child ID _____ Relation to Child _____ Date _____

Child Peer Code _____ Examiner _____ Observer _____